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ART UNIT	**PAPER NUMBER**
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Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/648,771	HAMYNEN, KIMMO	
	Examiner	Art Unit	
	Michael Y. Won	2155	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *08 August 2006*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-7,10-13,15,16,21,23-31,33,35 and 42-45* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-7,10-13,15,16,21,23-31,33,35 and 42-45* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

1. This action is in response to the amendment filed August 8, 2006.

2. Claims 1, 2, 4-7, 10-13, 15, 16, 21, 23-31, 33 have been amended and claims 8, 9, 14, 17-20, 22, 32, 34, 36-41 have been cancelled.

3. New claims 42-45 have been added.

4. Claims 1-7, 10-13, 15, 16, 21, 23-31, 33, 35, and 42-45 have been examined and are pending with this action.

Claim Rejections - 35 USC § 112

The following is a quotation of the first paragraph of 35 U.S.C. 112:

> The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

5. Claims, 1, 15, 23, 42, and 44 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter, which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention. The specification does

not explicitly teach "zooming in on the uniform resource locator, before the extraction attempt, but **after** locating and **recognizing the glyphs**" (emphasis added).

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

6. Claims 1-7, 10-13, 15, 16, 21, 23-28, 30, 31, 33, 35, 42-45 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kagehiro et al. (US 2003/0044068 A1) in view of Clark, P. et al. "Combining Statistical Measures to Find Image Text Regions", University of Bristbol, Department of Computer Science, September 2000, pp.450-453.

INDEPENDENT:

As per ***claim 1***, Kagehiro teaches a method comprising the steps of:

using a camera unit (see Fig.1 and pg.2, [0023]: "a camera is applied as an image capture device") to acquire a raw visual light image that contains a written uniform resource locator (see Fig.1 and pg.2, [0023]: "the URL address and the character line image on the object as denoted by reference numeral 105 are captured"),

converting the raw visual light image to an electronic image (see Fig.1 & Fig.2; pg.2, [0023]: "captured"; and pg.2, [0025]: "the object captured by an image capture device is displayed on a content display denoted by the reference numeral 201"),

having a device recognize glyphs of at least one particular standardized set of uniform resource locator characters in the electronic image (see Fig.1, Fig.5, and Fig.6; and pg.2, [0023]: "the character line embedded area extraction and the character line recognition are performed"),

attempting to extract remaining parts of the uniform resource locator from the electronic image after locating and recognizing the glyphs which include "http" or "www" (see Fig.1 & Fig.2; pg.2, [0023]: "the character line embedded area extraction and the character line recognition are performed"; and pg.2, [0025]: "The character line rectangle extraction processing is performed on the URL character line located closest to the marker");

sending the results of the extraction attempts in a request signal to a web server in order to access an Internet site (see pg.1, [0006]: "a means for transmitting the recognition result via a network" and pg.2, [0023]: "the data is transmitted through the wireless communication"),

processing a reply from the web server (see Fig.2; pg.1, [0006]: "means for receiving feedback via the network based on the recognition result"; and pg.2, [0025]: "the contents available at the URL corresponding to the recognition result are transmitted from the computer on a network to the mobile device"), and

presenting the Internet site (see Fig.2 and pg.2, [0025]: "the operator sees the contents on the display").

Although Kagehiro does teach of a mobile device (see Fig.1) he does not explicitly teach of having a mobile device perform the locating step.

Clark teaches of having a mobile device perform the locating step (see pg.450, Introduction: fourth paragraph: "Here we want to be able to identify text which may be at an orientation to the camera. In [2] we presented a method to locate and recover all regions of text in the image by first extracting local information such as page borders and edges around text", "We combine a number of measures using a neural network to classify the text region"; and last paragraph: "we desire recognition in the case when the text is too small to read and location of text at an unreadable angle... a computer controlled camera (wearable or otherwise) which can zoom in on the text in order to read it ").

It would have been obvious to a person of ordinary skill in the art at the time the invention was made to employ the teachings of Clark within the method of Kagehiro by implementing the mobile device to perform the locating step within the method because Clark teaches on page 450, Introduction; second paragraph, that such implementation replaces the typical "document/photograph scanner with a point and click camera, aid for the visually impaired, general Wearable Computing tasks benefiting from knowledge of local text, and automated tasks requiring the ability to read where it is not possible to use a scanner". Therefore, such means provides mobility and automation.

Kagehiro does not explicitly teach of further comprising zooming in on the uniform resource locator, before the extraction attempt, but after locating and recognizing the glyphs.

Clark teaches of zooming in on the uniform resource locator, before the extraction attempt, but after locating and recognizing the glyphs (see pg.450, Introduction, 2nd column, last paragraph: "We have directed...").

It would have been obvious to a person of ordinary skill in the art at the time the invention was made to employ the teachings of Clark within the method of Kagehiro by implementing zooming in on the uniform resource locator, before the extraction attempt, but after locating and recognizing the glyphs within the method because Clarke teaches in the same paragraph that such step overcomes the limitation of "when the text is too small to read" thereby improving the ability to extract.

As per ***claim 15***, Kagehiro teaches a system comprising:

a camera (see Fig.1 and pg.2, [0023]: "a camera is applied as an image capture device"), responsive to a raw visual light image that contains a written uniform resource locator (see Fig.1 and pg.2, [0023]: "the URL address and the character line image on the object as denoted by reference numeral 105 are captured"), the camera being configures to provide an electronic image signal indicative of the raw visual light image (see Fig.1 & Fig.2; pg.2, [0023]: "captured"; and pg.2, [0025]: "the object captured by an image capture device is displayed on a content display denoted by the reference numeral 201");

a uniform resource locator extraction device, responsive to the electronic image signal, the extraction device being configured to find and recognize glyphs of at least one particular standardized set of uniform resource locator characters in the electronic image (see Fig.1 and pg.2, [0023]: "the character line embedded area extraction and the character line recognition are performed"), and also for being configured to provide a uniform resource locator request signal indicative of results of attempting to extract remaining parts of the uniform resource locator that are extracted from the electronic image signal after finding and recognizing the glyphs, said glyphs including "http" or "www" (see Fig.1 & Fig.2; pg.2, [0023]: "the character line embedded area extraction and the character line recognition are performed"; and pg.2, [0025]: "The character line rectangle extraction processing is performed on the URL character line located closest to the marker");

an Internet interface, responsive to the uniform resource locator request signal, the Internet interface being configured to provide a web site signal indicative of an Internet site accessed via the Internet (see Fig.2; pg.1, [0006]: "means for receiving feedback via the network based on the recognition result"; and pg.2, [0025]: "the contents available at the URL corresponding to the recognition result are transmitted from the computer on a network to the mobile device"); and

a display, responsive to the web site signal, for presenting the Internet site (see Fig.2 and pg.2, [0025]: "the operator sees the contents on the display").

Kagehiro does not explicitly teach wherein the camera is further configured to zoom in on the uniform resource locator before the attempted extraction, but after finding and recognition of the glyphs.

Clark teaches of wherein the camera is further configured to zoom in on the uniform resource locator before the attempted extraction, but after finding and recognition of the glyphs (see pg.450, Introduction, 2nd column, last paragraph: "We have directed...").

It would have been obvious to a person of ordinary skill in the art at the time the invention was made to employ the teachings of Clark within the system of Kagehiro by implementing zooming in on the uniform resource locator before the attempted extraction, but after finding and recognition of the glyphs within the system because Clarke teaches in the same paragraph that such step overcomes the limitation of "when the text is too small to read" thereby improving the ability to extract.

As per ***claim 23***, Kagehiro teaches a mobile device comprising:

an initiation device configured to send an instruction (see pg.2, [0023]: "The content panel is a touch panel, through which an operator can directly provide instructions") to obtain a raw visual light image (see Fig.1 and pg.2, [0023]: "the URL address and the character line image on the object as denoted by reference numeral 105 are captured") which includes glyphs of at least one standardized set of uniform resource locator characters including "http" or "www" (see Fig.1 & Fig.2; pg.2, [0023]: "the character line embedded area extraction and the character line recognition are

performed"; and pg.2, [0025]: "The character line rectangle extraction processing is performed on the URL character line located closest to the marker"),

a camera (see Fig.1 and pg.2, [0023]: "a camera is applied as an image capture device"), responsive to the instruction from the initiation device, the camera being configured to receive the raw visual light image (see Fig.1 and pg.2, [0023]: "the URL address and the character line image on the object as denoted by reference numeral 105 are captured") and configured to provide an electronic image signal indicative of the raw visual light image (see Fig.1 & Fig.2; pg.2, [0023]: "captured"; and pg.2, [0025]: "the object captured by an image capture device is displayed on a content display denoted by the reference numeral 201");

a display, responsive to a web site signal indicative of an Internet site (see Fig.2 and pg.2, [0025]: "the operator sees the contents on the display") accessed by attempting to extract a uniform resource locator from the raw visual light image, wherein the attempt is after the mobile device recognizes the (see Fig.1 ,Fig.2, Fig.5, and Fig.6; and pg.2, [0023]: "the character line embedded area extraction and the character line recognition are performed"; and pg.2, [0025]: "The character line rectangle extraction processing is performed on the URL character line located closest to the marker"); and

an Internet interface, configured to provide the web site signal to the display after communicating with the Internet (see Fig.2 and pg.2, [0025]: "the operator sees the contents on the display");

Although Kagehiro does teach of a mobile device (see Fig.1) he does not explicitly teach that the mobile device locates.

Clark teaches of having a mobile device performing locating (see pg.450, Introduction: fourth paragraph: "Here we want to be able to identify text which may be at an orientation to the camera. In [2] we presented a method to locate and recover all regions of text in the image by first extracting local information such as page borders and edges around text", "We combine a number of measures using a neural network to classify the text region"; and last paragraph: "we desire recognition in the case when the text is too small to read and location of text at an unreadable angle... a computer controlled camera (wearable or otherwise) which can zoom in on the text in order to read it ").

It would have been obvious to a person of ordinary skill in the art at the time the invention was made to employ the teachings of Clark within the device of Kagehiro by implementing the mobile device to perform locating within the device because Clark teaches on page 450, Introduction; second paragraph, that such implementation replaces the typical "document/photograph scanner with a point and click camera, aid for the visually impaired, general Wearable Computing tasks benefiting from knowledge of local text, and automated tasks requiring the ability to read where it is not possible to use a scanner". Therefore, such means provides mobility and automation.

Kagehiro does not explicitly teach of further comprising zooming in on the uniform resource locator, before the extraction attempt, but after locating and recognizing the glyphs.

Clark teaches of zooming in on the uniform resource locator, before the extraction attempt, but after locating and recognizing the glyphs (see pg.450, Introduction, 2nd column, last paragraph: "We have directed...").

It would have been obvious to a person of ordinary skill in the art at the time the invention was made to employ the teachings of Clark within the method of Kagehiro by implementing zooming in on the uniform resource locator, before the extraction attempt, but after locating and recognizing the glyphs within the method because Clarke teaches in the same paragraph that such step overcomes the limitation of "when the text is too small to read" thereby improving the ability to extract.

As per ***claim 42***, Kagehiro teaches an apparatus comprising:

an initiation device, configured to send an instruction to obtain a raw visual light image which includes glyphs of at least one standardized set of uniform resource locator characters, including "http" or "www" (see pg.2, [0023]);

a camera (see Fig.1 and pg.2, [0023]: "a camera is applied as an image capture device"), responsive to the instruction from the initiation device, the camera being configured to receive the raw visual light image (see Fig.1 and pg.2, [0023]: "the URL address and the character line image on the object as denoted by reference numeral 105 are captured") and configured to provide an electronic image signal indicative of the raw visual light image (see Fig.1 & Fig.2; pg.2, [0023]: "captured"; and pg.2, [0025]: "the object captured by an image capture device is displayed on a content display denoted by the reference numeral 201");

a display (see Fig.4, #403), responsive to a web site signal indicative of an Internet accessed by attempting to extract a uniform resource locator from the raw visual light image, wherein the attempt is after the apparatus recognizes the glyphs (see pg.2-pg.3, [0030]: "Whether the character line is a URL address or other character line is distinguished in step 510"); and

an Internet interface, configured to provide the web site signal to the display after communicating with the Internet (see pg.2, [0023]: "the information related to the recognized contents on the network are searched, transmitted, and displayed").

Although Kagehiro does teach of a mobile device (see Fig.1) he does not explicitly teach that the mobile device locates.

Clark teaches of having a mobile device performing locating (see pg.450, Introduction: fourth paragraph: "Here we want to be able to identify text which may be at an orientation to the camera. In [2] we presented a method to locate and recover all regions of text in the image by first extracting local information such as page borders and edges around text", "We combine a number of measures using a neural network to classify the text region"; and last paragraph: "we desire recognition in the case when the text is too small to read and location of text at an unreadable angle... a computer controlled camera (wearable or otherwise) which can zoom in on the text in order to read it ").

It would have been obvious to a person of ordinary skill in the art at the time the invention was made to employ the teachings of Clark within the apparatus of Kagehiro by implementing the mobile device to perform locating within the apparatus because

Clark teaches on page 450, Introduction; second paragraph, that such implementation replaces the typical "document/photograph scanner with a point and click camera, aid for the visually impaired, general Wearable Computing tasks benefiting from knowledge of local text, and automated tasks requiring the ability to read where it is not possible to use a scanner". Therefore, such means provides mobility and automation.

Kagehiro does not explicitly teach wherein the camera is further configured to zoom in on the uniform resource locator before the attempted extraction, but after finding and recognition of the glyphs.

Clark teaches of wherein the camera is further configured to zoom in on the uniform resource locator before the attempted extraction, but after finding and recognition of the glyphs (see pg.450, Introduction, 2nd column, last paragraph: "We have directed...").

It would have been obvious to a person of ordinary skill in the art at the time the invention was made to employ the teachings of Clark within the apparatus of Kagehiro by implementing zooming in on the uniform resource locator before the attempted extraction, but after finding and recognition of the glyphs within the apparatus because Clarke teaches in the same paragraph that such step overcomes the limitation of "when the text is too small to read" thereby improving the ability to extract.

As per ***claim 44***, Kagehiro teaches a software product for use in a mobile terminal, the software product comprising a computer readable medium having

executable codes embedded therein; the codes, when executed, being adapted to carry out the functions of:

using a camera unit (see Fig.1 and pg.2, [0023]: "a camera is applied as an image capture device") to acquire a raw visual light image that contains a written uniform resource locator (see Fig.1 and pg.2, [0023]: "the URL address and the character line image on the object as denoted by reference numeral 105 are captured"),

converting the raw visual light image to an electronic image (see Fig.1 & Fig.2; pg.2, [0023]: "captured"; and pg.2, [0025]: "the object captured by an image capture device is displayed on a content display denoted by the reference numeral 201"),

having a mobile device recognize glyphs of at least one particular standardized set of uniform resource locator characters in the electronic image (see Fig.1, Fig.5, and Fig.6; and pg.2, [0023]: "the character line embedded area extraction and the character line recognition are performed"),

attempting to extract remaining parts of the uniform resource locator from the electronic image after locating and recognizing the glyphs which include "http" or "www" (see Fig.1 & Fig.2; pg.2, [0023]: "the character line embedded area extraction and the character line recognition are performed"; and pg.2, [0025]: "The character line rectangle extraction processing is performed on the URL character line located closest to the marker");

sending the results of the extraction attempt in a request signal to a web server in order to access an Internet site, processing a reply from the web server, and presenting

the Internet site (see pg.2, [0023]: "the information related to the recognized contents on the network are searched, transmitted, and displayed").

Although Kagehiro does teach of a mobile device (see Fig.1) he does not explicitly teach that the mobile device locates.

Clark teaches of having a mobile device performing locating (see pg.450, Introduction: fourth paragraph: "Here we want to be able to identify text which may be at an orientation to the camera. In [2] we presented a method to locate and recover all regions of text in the image by first extracting local information such as page borders and edges around text", "We combine a number of measures using a neural network to classify the text region"; and last paragraph: "we desire recognition in the case when the text is too small to read and location of text at an unreadable angle... a computer controlled camera (wearable or otherwise) which can zoom in on the text in order to read it ").

It would have been obvious to a person of ordinary skill in the art at the time the invention was made to employ the teachings of Clark within the software product of Kagehiro by implementing the mobile device to perform locating within the software product because Clark teaches on page 450, Introduction; second paragraph, that such implementation replaces the typical "document/photograph scanner with a point and click camera, aid for the visually impaired, general Wearable Computing tasks benefiting from knowledge of local text, and automated tasks requiring the ability to read where it is not possible to use a scanner". Therefore, such means provides mobility and automation.

Kagehiro does not explicitly teach of further comprising zooming in on the uniform resource locator, before the extraction attempt, but after locating and recognizing the glyphs.

Clark teaches of zooming in on the uniform resource locator, before the extraction attempt, but after locating and recognizing the glyphs (see pg.450, Introduction, 2nd column, last paragraph: "We have directed...").

It would have been obvious to a person of ordinary skill in the art at the time the invention was made to employ the teachings of Clark within the software product of Kagehiro by implementing zooming in on the uniform resource locator, before the extraction attempt, but after locating and recognizing the glyphs within the software product because Clarke teaches in the same paragraph that such step overcomes the limitation of "when the text is too small to read" thereby improving the ability to extract.

DEPENDENT:

As per ***claims 2, 16, 24, 43, and 45***, which depend on claims 1, 15, and 23, respectively, Kagehiro does not explicitly teach of further comprising: approximating an angle between a plane of at least one of the glyphs and a plane perpendicular to a line of sight from the camera; and compensating for said angle before attempting extraction of remaining parts of the uniform resource locator.

Clark teaches of approximating an angle between a plane of at least one of the glyphs and a plane perpendicular to a line of sight from the camera; and compensating for said angle before attempting extraction of remaining parts of the uniform resource

locator (see Fig.1, 3, & 4; and pg.450, Abstract and Introduction: "align it correctly to obtain a fronto-parallel view").

It would have been obvious to a person of ordinary skill in the art at the time the invention was made to employ the teachings of Clark within the method, system, device, apparatus and software product of Kagehiro by implementing approximating an angle between a plane of a glyph of a certain character and a plane perpendicular to a line of sight from the camera within method, system, device, apparatus and software product because Clarke teaches on pages 450-451, Introduction: last paragraph, "The advantage this facility gives these applications is that the resolution can be minimized" and Kagehiro teaches on page 1, section [0002], "the character recognition is performed using a low resolution image capture by the camera of the mobile device". Therefore, Clark would provide the "resolution enhancing processing" (see pg.2, [0029]) and "pixel complementing... to improve the recognition ration" (see pg.3, [0037]), taught by Kagehiro because Clark teaches that his system is employable in a system that minimizes resolution.

As per ***claim 3***, which depends on claims 1, Kagehiro further teaches wherein the camera is a video or still camera for capturing arbitrary scenes (see Fig.1 and Fig.6).

As per ***claim 4***, which depends on claim 2, Kagehiro further teaches wherein in the certain character is the letter "o" (see Fig.2 and Fig.3).

As per ***claim 5***, which depends on claim 1, Kagehiro further teaches extracting the uniform resource locator is performed at least partly via a telecommunications

network (see pg.2, [0023]: "data is transmitted through wireless communication... By using computers connected to a network").

As per ***claims 6 and 30***, which depend on claims 1 and 23, respectively, Kagehiro teaches of further comprising manually amending the results if the results are different from the written uniform resource locator (implicit: see pg.2, [0023]: "The content display is a touch panel, through which an operator **can directly provide instructions**" and pg.4, [0041]: "inputting number "1"").

As per ***claim 7***, which depend on claim 1, Kagehiro teaches of further comprising:

selecting a portion of the electronic image containing the written uniform resource locator, if the results are different from the written uniform resource locator,

extracting a more accurate uniform resource locator from the portion of the electronic image (see pg.2, [0029] and pg.4, [0041]),

sending the more accurate uniform resource locator to a corresponding web server, processing a further reply from the corresponding web server,

displaying a desired web site accessed via the corresponding web server in response to the more accurate uniform resource locator (see claim 1 rejection above).

As per ***claim 10***, which depend on claim 1, Kagehiro teaches of further comprising performing the extracting, sending, and processing steps again, if the reply indicated an invalid uniform resource locator (see pg.2, [0029]).

As per ***claim 11***, which depend on claim 10, Kagehiro further teaches wherein the performing is performed by a different computer having a greater capacity (see pg.3, [0032]).

As per ***claim 12***, which depend on claim 1, Kagehiro further teaches wherein the attempt also yields at least one alternate uniform resource locator that will be tried if the extractable uniform resource locator turns out to be invalid (see pg.2, [0029] and pg.4, [0041]).

As per ***claim 13***, which depend on claim 7, Kagehiro further teaches wherein the step of selecting the portion of the electronic image is performed manually using stylus (see pg.2, [0025]: "the operator can select the recognition target character line with ease by operating the device, or shifting the marker" and pg.3, [0035]).

As per ***claims 21***, which depend on claim 16, Kagehiro teaches of further comprised of an editing tool, for manually amending the results if they are different from the written uniform resource locator (implicit: see pg.2, [0023]: "The content display is a touch panel, through which an operator **can directly provide instructions**" and pg.4, [0041]: "inputting number "1"").

As per ***claim 25***, which depend on claim 23, Kagehiro and Clark further teaches wherein the camera is a video or still camera for capturing arbitrary scenes (see claim 3 and 8 rejection above).

As per ***claim 26***, which depend on claim 24, Kagehiro further teaches wherein the one of the glyphs is the letter "o" (see Fig.2 and Fig.3).

As per ***claim 27***, which depend on claim 23, Kagehiro teaches of further comprising a uniform resource locator extraction device that is responsive to the electronic image signal provided by the camera (see pg.2, [0023]), the uniform resource locator extraction device being configured to find the glyphs, and configured to process the electronic image signal, and configured to provide a uniform resource locator request signal to the Internet interface (see pg.2, [0024]);

wherein the internet interface is responsive to the uniform resource locator request signal, and is for providing the web site signal after communicating with the internet (see claim 1 rejection above).

As per ***claim 28***, which depend on claim 23, Kagehiro further teaches wherein the Internet interface is responsive to the electronic image signal, and is configured to process the electronic image signal by conveying the electronic image signal to an Internet extraction site (see pg.2, [0023]: "the information related to the recognized contents on the network are searched, transmitted, and displayed" and pg.2, [0024]: "the contents available at the URL ... are transmitted from the computer to the mobile device").

As per ***claim 31***, which depend on claim 23, Kagehiro teaches of further comprising an image selection device, responsive to user input and responsive to the electronic image signal, configured to provide an image portion signal indicative of a portion of the electronic image where the written uniform resource locator is depicted, and

wherein the mobile device is configured to process the image portion signal to obtain the web site signal from the Internet interface (see pg.1, [0006]-[0008]).

As per ***claim 33***, which depend on claim 31, Kagehiro further teaches wherein the image selection device includes a stylus for selecting the portion of the electronic image where the written uniform resource locator is depicted (see pg.2, [0025]: "the operator can select the recognition target character line with ease by operating the device, or shifting the marker" and pg.3, [0035]).

As per ***claim 35***, which depend on claim 1, Kagehiro further teaches of a computer-readable medium or media, encoded with a data structure for performing the method of claim 1 (see pg.2, [0027]).

7. Claim 29 is rejected under 35 U.S.C. 103(a) as being unpatentable over Kagehiro et al. (US 2003/0044068 A1) and Clark, P. et al. "Combining Statistical Measures to Find Image Text Regions", University of Bristbol, Department of Computer Science, September 2000, pp.450-453, further in view of Smethers (US 6,560,640 B2)

As per ***claim 29***, which depend on claim 23, Kagehiro and Clark do not explicitly teach wherein the initiation device is configured to give the user an option to make a bookmark for the uniform resource locator, and wherein the mobile device is configured to obtain the web site signal when the bookmark is retrieved.

Smethers teaches wherein the initiation device is configured to give the user an option to make a bookmark for the uniform resource locator, and wherein the mobile

device is configured to obtain the web site signal when the bookmark is retrieved (see col.8, lines 27-30 and col.10, lines 5-7 & 26-28).

It would have been obvious to a person of ordinary skill in the art at the time the invention was made to employ the teaching of Smethers within the device of Kagehiro and Clark by implementing giving the user an option to make a bookmark for the uniform resource locator within the device because Smethers teaches that such means improves transmission efficiency, reduces user navigation, and amount of memory resources within a wireless device (see col.2, lines 37-44).

Response to Arguments

8. Applicant's arguments filed August 8, 2006 have been fully considered but they are not persuasive.

A. Applicant(s) argue with respect to claim 1 that Clark's teachings of zooming is different than the claimed invention of zooming because in Clarks teaching, prior to zooming there has been no finding or recovering of "single word or lines".

It is agreed that in the example given by Clark the zooming process occurs when the text is too small to read, but clearly the objective is to **assist** in the ability to read (emphasis added). The examiner believes that this is also true for the claimed invention since the specification states on page 4, lines 20-22 that the user is "in a position to **help** the OCR system by zooming the area of the image in which to search for the

URL". The functionality remains the same, but the occurrence of the zooming step is clearly subjective.

Based on the argument, one of ordinary skill in the art would then question pertaining to the claimed invention, would the zooming process not occur if a "single word or lines" was not recognized? Clearly not. The scenario or environment of the reference and the claimed invention is not the same therefore the argument is not justified.

Furthermore, it is noted that the features upon which applicant relies (i.e., "reading" or "finding or recovering of single words or lines" prior to zooming) are not recited in the rejected claim(s). Although the claims are interpreted in light of the specification, limitations from the specification are not read into the claims. See *In re Van Geuns*, 988 F.2d 1181, 26 USPQ2d 1057 (Fed. Cir. 1993).

B. Applicant(s) argue with respect to claim 1 that Kagehiro teaches a locating process that is entirely different than the claimed invention because Kagehiro requires "various manual steps by the user" and Clark does not teach or suggest "locate and recognize any particular characters prior to zooming".

In response to applicant's arguments against the references individually, one cannot show nonobviousness by attacking references individually where the rejections are based on combinations of references. See *In re Keller*, 642 F.2d 413, 208 USPQ 871 (CCPA 1981); *In re Merck & Co.*, 800 F.2d 1091, 231 USPQ 375 (Fed. Cir. 1986).

Kagehiro clearly suggests an operator performing the locating (see Kagehiro page 2, paragraph [0025]: "the operator can select the recognition target character line with ease by operating the device"), however, the applicant(s) specification also suggests this feature. On page 4, lines 11-12: "camera user's line of sight"; lines 20-22: "user is also in a position to help... by zooming the picture, and/or by selecting", page 10, line 2: "user can indicate a portion of the electronic image where the written URL is depicted", and so on clearly supports that the operator selects the recognition target character line. Clearly, the basis of the argument that the locating step is somehow automated is not supported by the specification.

Nonetheless, Clark teaches of an automated process of locating and zooming.

The combination of the teachings of Kagehiro and Clark clearly and explicitly teach all the limitations of claim 1.

C. Applicant(s) argue that because the claimed invention locates and recognizes "glyphs" such as "www", "http", or ".com" that the claimed invention teaches away from Kagehiro.

Kagehiro teaches on page 1 paragraph [0001], that it is possible to capture an image including a character string (glyph) noted by a user and "it becomes possible to extract the information related to the character string". Clearly this functionality is known prior art functionality.

D. Applicant(s) argue that Kagehiro teaches character line recognition at the network computer (server) and not at the mobile device.

Fig.5 of Kagehiro clearly and explicitly teaches that the recognition occurs at the mobile device (see step 519).

Conclusion

9. For the reasons above claims 1-7, 10-13, 15, 16, 21, 23-31, 33, 35, and 42-45 remain rejected and pending.

10. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Michael Y. Won whose telephone number is 571-272-3993. The examiner can normally be reached on M-Th: 7AM-5PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Saleh Najjar can be reached on 571-272-4006. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Michael Won

August 28, 2006